Reducing The Risk IN THE HOME



SAFER ALTERNATIVES

Introduction

One of the best means of avoiding exposure to household hazardous materials is to use safer alternatives whenever possible.

Included in this section are time-honored recipes and suggestions to help you make the switch toward safer household products. Ingredients followed by instructions will guide you through an array of easy-to-make, easy-to-use, safer alternatives. Some ingredients recommended as alternatives are safer, but not non-toxic.

Making your own simple and effective products is fun and economical. We think you will be happily surprised with the results.

Aerosols

Aerosols contain an active ingredient and a liquid or gaseous propellant that is packed under at least 40 pounds of pressure per square inch. These pressurized aerosol containers are explosive and may be flammable. Depending upon other ingredients, the aerosol sprays may be irritants, corrosives, poisons or contain chlorofluorocarbons (CFCs).

Prevention. Use non-aerosol (pump-spray, roll-on or liquid) products.

Air Fresheners

Most commercial air fresheners do not freshen the air at all. Instead, they mask one odor with another, coats your nasal passages with an undetectable oil film, or diminish your sense of smell with a nerve-deadening agent. For a safer alternative, you may wish to try one of the following.

Prevention. Locate the source of the odor problem and take corrective action.

Repair. Repair structure to correct moisture problems. Add vents, vapor barriers, detour water drainage away from structure, etc.

Ventilation. Open windows or doors in the house for at least a short period every day. This will also help to reduce toxic fumes that may be building up indoors.

ALL PURPOSE AIR FRESHENERS

Vinegar. Distribute partially filled saucers of vinegar around the room or boil 1 tablespoon of white vinegar in 1 cup of water to eliminate unpleasant cooking odors.

Cinnamon and Cloves. Boil these spices for a fragrant smell. For ease of cleaning, make a cheesecloth bag to contain these spices, and boil the cheesecloth bag. An excellent alternative when entertaining is to steep spiced tea or cider.

Potpourri. Buy or make your own potpourri from your favorite herbs and spices. Place the potpourri in a small basket or jar or in small sachet bags.

Orange, lemon or lime, cloves, orris root powder, and ground cinnamon.Make a citrus pomander by inserting cloves into the citrus fruit. If the skin is too tough, make small holes with a toothpick first. When the entire fruit is covered with cloves, roll in a mixture or 1/2 teaspoons orris root powder and 1-1/2 teaspoons cinnamon. Wrap in tissue and store in a drawer, cabinet, or closet.

KITCHEN AND FOOD ODORS

Vanilla. Place pure vanilla on a cotton ball in a small saucer. Place the saucer in the car or refrigerator to remove odors. It is reported to remove even skunk odors. Keep the cotton ball out of reach of children; vanilla has a high alcohol content.

Baking Soda. Place a partially filled saucer of baking soda on the refrigerator shelf. Replace every two months and when you do, pour the contents of the used box down the drain to remove odors and keep the drain clean. Baking soda can also be used to deodorize bottles by filling them with undiluted baking soda and allowing the bottles to soak overnight. Then wash as usual.

Borax. Empty the garbage frequently and clean the can as needed. To inhibit growth of odor-producing molds and bacteria, sprinkle 1/2 cup Borax in the bottom of the garbage can.

Vinegar or Celery Stalk. To avoid or remove onion odors from your hands, rub white vinegar on your hands before and after slicing. Rubbing hands with

the end of a celery stalk will also remove the odor.

Salt. Rubbing salt into a wooden cutting board will eliminate odors as well as lift stains

Lemon or Lime. Rub a cut lemon or lime on the cutting board to get rid of onion, garlic or fish odors.

Appliance Cleaners

Rubbing alcohol. Instead of using commercial waxes, shine with rubbing alcohol.

Whitening paste. To get rid of yellowing on appliances mix together: 1/2 cup bleach, 1/4 cup baking soda and four cups of warm water. Apply with a sponge and let set for 10 minutes. Rinse and dry thoroughly.

Club soda. Use club soda to clean and polish at the same time.

Arts & Crafts

Permanent felt-tip markers, rubber cement, spray fixatives, powdered clay and instant paper-mache are standard arts and crafts supplies found in many homes. All of these materials contain chemicals that are hazardous If inhaled, absorbed or swallowed. Children are especially prone to mishandling, chewing, sucking, inhaling or swallowing art materials and decorating their hands and face with them. In order to choose safe art supplies to keep at home, for school projects or just for fun, consider the following tips:

AVOID. Powdered tempera paints, pastels, chalks or dry markers that create dust.

Substitute. Liquid tempera paints, crayons, oil pastels or dustless chalks. **AVOID.** Epoxy glue, instant glue, airplane glue and solvent based adhesives. **Substitute.** White glue, school paste or preservative-free wheat paste.

AVOID. Permanent felt tip markers (may contain toluene and other toxic solvents) or scented felt-tip markers which teach children bad habits about eating and sniffing art materials.

Substitute. Water-based markers.

AVOID. Fiber-reactive dyes, direct (household) dyes and other commercial dyes.

Substitute. Natural dyes, such as dyes made from vegetables, onion skins, tea, flowers and other food dyes.

AVOID. Instant paper-mache (may contain asbestos fibers and lead from pigments in colored printing inks).

Substitute. Paper-mache made from black-and-white newspaper and library paste, white paste or flour and water paste.

AVOID. Aerosol sprays.

Substitute. Brushes and water-based paints in splatter techniques. **AVOID.** Oil-based paints, turpentine, benzene, toluene and other rubber cement and its thinner.

Substitute. Water-based paints, glues, inks, etc.

Automatic Coffee Maker

Vinegar. Remove mineral deposits and unclog the coffee maker by pouring in one cup of vinegar and running it through as you would water; then run two pots of water through to remove the vinegar taste. To keep the vinegar smell minimized you might want to do this under the stove exhaust fan.

Batteries, Dry Cell, Button, Disc, Etc.

Dry cell, button and disc batteries are used in flashlights, radios, cameras, hearing aids, watches, toys, calculators and other items in the home. These batteries may contain zinc, lead, alkaline, mercury, nickel. cadmium, silver and electrolytes. If batteries leak or explode the chemical substances contained in these batteries can cause internal and external burns and irritation. These batteries also contain heavy metals, such as lead, mercury, lithium, manganese, silver, zinc, cadmium, and nickel which can accumulate in ground and surface water, wildlife and humans when disposed of improperly.

Prevention. Use rechargeable batteries. Avoid battery operated products.

Bleach (Chlorine)

Household bleaches which claim to disinfect are classified as pesticides under the Federal Hazardous Substances Act. Liquid household bleaches contain approximately 5% sodium hypochlorite solution. Chlorine bleach liquid and vapors are irritating to the skin, eyes, nose and throat. Bleach when mixed with substances such as ammonia, toilet bowl cleaners, drain cleaners or vinegar, forms toxic gases which can cause coughing, loss of voice, a feeling of burning or suffocation, and even death. **DO NOT MIX BLEACH WITH**

OTHER CLEANERS. Consider using these alternatives whenever possible:

Lemon juice. Use lemon juice in the wash cycle to "freshen" clothing.

Hydrogen peroxide. Hydrogen peroxide, in a standard 3 percent solution is an oxidizing bleach, is safe enough to also use as a disinfectant.

Borax. For household disinfecting, borax is an option.

Baking soda. Reduce the amount of liquid bleach used in your wash and add baking soda as a booster.

Oxygen (dry) bleach. For washing clothes, oxygen bleaches work well.

Broiler Pan Cleaner

Laundry detergent. Sprinkle the burned food areas with a dry laundry detergent, cover with a damp paper towel, let set a few minutes, rinse.

Carpet/Rug (also see "Spot/Stain Remover")

IF YOU PLAN TO SHAMPOO YOUR CARPET, FIRST TRY A PRE-CLEANING

TREATMENT. Sweep the carpet, which will make the nap stand up and loosen the imbedded dirt. Next vacuum. With this work alone, the rug should show a noticeable improvement, so much in fact that you may decide to delay the shampooing.

To neutralize odors: Borax and cornmeal. Sprinkle the carpet with a mixture of 1 cup Borax and 2 cups cornmeal. Let this mixture stand for an hour before vacuuming. Another alternative is Baking Soda. Making certain that the carpet is dry, sprinkle baking soda liberally over the entire carpet. Wait at least 15 minutes, or overnight if the odor is particularly bad, before vacuuming.

Wine spills. Pour a thick layer of salt on red wine spills: to absorb the wine, get as much of the salt into contact with the wine as you can; then sponge up the salt.

Chimney

Prevention. Burn dry clean wood (firewood should be seasoned at least 6-8 months before use); a hot fire will burn the wood more completely and cleanly. Watch your chimney; if you can see smoke, the air supply to your fire should be increased. Do not damper too far; smoldering fires cause the most soot and creosote buildup, as well as pollute the air. Follow operating instructions for your wood store and use a flue brush.

Cleaners, All-Purpose

Baking Soda. Dissolve 4 tablespoons baking soda in 1 quart warm water for a general cleaner. Or use baking soda on a damp sponge. Baking soda will clean and deodorize all kitchen and bathroom surfaces.

Pumice stick. A pumice stick, available at many hardware stores, contains no harsh detergents or other chemicals. It will effectively clean oven racks and barbecue grills, remove rust from tools and handle many other cleaning jobs.

Vinegar and Salt. Mix together for a good surface cleaner.

Decal Remover

Vinegar. To remove no-slip decals from the bathtub, saturate a cloth or sponge and squeeze hot vinegar over decals. Vinegar also removes stick-on hooks from painted walls. Saturate a cloth or sponge with vinegar and squeeze the liquid behind the hook so that the vinegar comes in contact with the adhesive. In addition, vinegar can be used to remove price tags and other decals from glass, wood, and china. Paint the label or decal with several coats of white vinegar. Give the vinegar time to soak in and after several minutes the decal can be rubbed off.

Dishwear Cleaner

Borax. Borax is a good grease cutter and disinfectant.

Baking soda. Scrub with baking soda to remove coffee and other stains on dishware.

Disinfectant

Soap. Regular cleaning with plain soap and hot water will kill some bacteria.
Keep things dry. Mold, mildew, and bacteria cannot live without moisture.
Borax. Borax has long been recognized for its disinfectant and deodorizing properties. Mix 1/2 cup Borax into 1 gallon hot water and clean with this solution.

Isopropyl Alcohol. This is an excellent disinfectant. Sponge and allow to dry. (It must dry to do its job.) Use in a well-ventilated area and wear gloves.

Drain Cleaners & Drain Openers

Prevention. To avoid clogging drains, use a drain strainer to trap food particles and hair; collect grease in cans rather than pouring it down the drain; pour a kettle of boiling water down the drain weekly to melt fat that may be building up in the drain; or weekly put some vinegar and baking soda down your drain to break down fat and keep your drain smelling fresh.

Plunger. A time-honored drain opener is the plunger. This inexpensive tool will usually break up the clog and allow it to float away. It may take more than a few plunges to unclog the drain. DO NOT USE THIS METHOD AFTER ANY COMMERCIAL DRAIN OPENER HAS BEEN USED OR IS STILL PRESENT IN THE STANDING WATER.

Baking Soda and Vinegar. Pour 1/2 cup baking soda down the drain. Add 1/2 cup white vinegar and cover the drain if possible. Let set for a few minutes, then pour a kettle of boiling water down the drain to flush it. The combination of baking soda and vinegar can break down fatty acids into soap and glycerine, allowing the clog to wash down the drain. DO NOT USE THIS METHOD AFTER ANY COMMERCIAL DRAIN OPENER HAS BEEN USED OR IS STILL PRESENT IN THE STANDING WATER.

Salt and Baking Soda. Pour 1/2 cup salt and 1/2 cup baking soda down the drain. Follow with 6 cups boiling water. Let sit overnight and then flush with water. The hot water should help dissolve the clog and the baking soda and salt serve as an abrasive to break through the clog.

Mechanical Snake (and Garden Hose). A flexible metal snake can be purchased or rented. It is threaded down the clogged drain and manually pushes the clog away. If used in conjunction with a running garden hose, it can even clear a blockage in the main drain to the street. First crank the snake and feed it into the pipe. Next withdraw the snake and flush the pipe by inserting a garden hose with the water turned on full. With some luck, it may save you the expense of a plumber.

Floor Cleaners & Floor Polishers

ALL PURPOSE FLOOR CLEANERS

Vinegar. A few drops in the cleaning water will help remove grease particles. Dull, greasy film on no-wax linoleum can be washed away with 1/2 cup white vinegar mixed into 1/2 gallon water. Your floor will look sparkling clean.

Club Soda. Polishing your floor with Club Soda will make it sparkle.

Sour Milk or Skim Milk. Rather than polishing, mix sour milk or skim milk in the rinse water. The floor will shine.

Murphy's Oil Soap. Use according to package directions.

FLOOR CLEANERS

For wood floors: Vegetable Oil and Vinegar. Mix a 1 to 1 ratio of oil and vinegar into a solution and apply a thin coat. Rub in well.

For painted wooden floors: *Washing Soda.* Mix 1 teaspoon washing soda into 1 gallon hot water and wash the floor with a mop, sponge, or soft bristled brush. This solution can also be used to remove mildew.

For rubber tiles: *Mild detergent.* Avoid oils, solvents, and strong alkalis as they will harm the surface. Wash with clear water, a mild detergent, and a clean mop.

For brick and stone floors: *Vinegar.* Mix 1 cup white vinegar into 1 gallon water. Scrub the floor with a brush and the vinegar solution. Rinse with clean water

For ceramic tile floors: *Vinegar.* Mix 1/4 cup white vinegar (more if very dirty) into 1 gallon water. This solution removes most dirt without scrubbing and doesn't leave a film. Washing ceramic tiles with soap does not work very well in hard water areas as it leaves an insoluble film.

For Linoleum: Mild Detergent, Baby Oil, and Sour Milk or Skim Milk. Damp mop using a mild detergent and water for day to day cleaning. Keep water away from seams and edges to prevent loosening of the tiles. To preserve the linoleum floor you may wish to add a capful of baby oil to the mop water. Adding sour milk or skim milk to the rinse water will shine the floor without polishing.

SPECIAL PROBLEMS

To remove black heel marks: Baking Soda. Rub the heel mark with a paste of baking soda and water. Don't use too much water or the baking soda will lose its abrasive quality.

To remove tar: Butter or Margarine. Scrape up excess tar with the side of a dull knife, then rub vigorously with butter or margarine. Rub again with your fingernail or anything that won't scratch the floor. Finally, wipe up the tar with a dry cloth.

To remove crayon marks: *Toothpaste.* Crayon marks on the floor may be removed by rubbing them with a damp cloth containing toothpaste. Toothpaste will not work well on wallpaper or porous surfaces.

To remove grease from wood floors: *Ice Cube or Cold Water.* If you spill grease on a wood floor, immediately place an ice cube or very cold water on the spot. The grease will harden and can then be scraped off with a knife. Then iron a piece of cloth over the grease spot.

WAX REMOVER

For Vinyl and Asbestos Tiles: Club Soda. Remove wax buildup by pouring a small amount of club soda on a section. Scrub this in well. Let it soak in a few minutes and wipe clean.

For Linoleum Flooring: *Isopropyl Alcohol.* To remove old wax by mopping, mix a solution of 3 parts water to 1 part rubbing alcohol. Scrub this in well and rinse thoroughly. Be sure the area is well-ventilated and wear gloves.

Furniture Polish

The idea behind furniture polish for wood products is to absorb oil into the wood. Many oils commonly found in our kitchens work very well.

ALL PURPOSE WOOD POLISHERS

Olive Oil and Vinegar. Mix 3 parts oil to 1 part vinegar. Apply and polish with a clean soft cloth.

Vegetable Oil or Olive Oil and Lemon Juice. Mix 2 parts oil and 1 part lemon juice. Apply and polish with a soft cloth. This leaves furniture looking and smelling good.

SPECIAL PROBLEMS

For Grease Spots: Salt. Immediately pour salt on the grease spot to absorb grease and prevent staining.

For Scratches: Lemon Juice and Vegetable Oil. Mix equal parts of lemon juice and vegetable oil. Rub into scratches with a soft cloth until scratches disappear.

For Water Spots: *Toothpaste.* To remove water marks, rub gently with toothpaste on a damp cloth.

For Washing Wood: *Mild Soap.* Dampen cloth with a solution of water and mild soap, such as Ivory or Murphy's Oil Soap. Wring the cloth almost dry and wipe the furniture section by section, drying with a clean dry cloth as you go so that no section stays wet.

For Refinishing Old Furniture: *Murphy's Oil Soap.* Before you set to work on an old piece of furniture with chemical finish removers, try an old stand-by, Murphy's Vegetable Oil Soap. This simple, nontoxic solvent may be all the help an antique needs. Follow label directions.

WOOD POLISHERS

For Unfinished Wood: *Mineral Oil.* Mineral oil is flammable. Apply sparingly with a soft cloth. For lemon oil polish, dissolve 1 teaspoon lemon oil into 1 pint mineral oil. CAUTION: Mineral spirits should never be substituted for mineral oil as it can be dangerous when inhaled or absorbed through the skin.

For Oak Wood: Beer, Sugar and Beeswax. Boil one quart beer with 1 teaspoon sugar and 2 tablespoons beeswax. Cool, wipe onto wood, and allow to dry. Polish when dry with a chamois cloth.

For Mahogany: Vinegar. Mix equal parts white vinegar and warm water. Wipe onto wood and then polish with a chamois cloth.

Grills

Aluminum Foil. Tear off a sheet of heavy-duty aluminum foil large enough to completely cover your grill. Press foil shiny side down on the grill and fold the sides under, covering as tightly as possible. When the coals have nearly reached their hottest point, place the grill over the coals for 10 minutes. Remove the foil, and any charred grease or food should drop off the grill.

Vegetable Oil. Before using the grill, spray it heavily with vegetable oil. Then wipe clean when grill has cooled.

Hand Cleaners

Prevention. Use nitrile or other type gloves suited for the activity. **Oils.** Massage hands with a few drops of baby oil, margarine or butter, or petroleum jelly; wipe dry; wash with soap and water.

Non-toxic. Use a lanolin and glycerin-based, non-toxic hand cleaner.

Hair Products

For Hair Gel: *Gelatin.* Dissolve I/2 to 1 teaspoon of unflavored gelatin in 1 cup warm water. Keep refrigerated and use as you would a purchased gel.

For Hair Spray: Citrus. Chop 1 lemon (or orange for dry hair). Place in a pot and cover with 2 cups of hot water. Boil until only half remains. Cool and strain. Add more water if needed. Refrigerate in a spray bottle.

Laundry Products

SPOT AND STAIN REMOVER (See "Spot/Stain Remover")

White Vinegar. Eliminate soap residue by adding 1 cup of white vinegar to the water's final rinse. Vinegar is too mild to harm fabrics but strong enough to dissolve alkaline in soaps and detergents. Vinegar also breaks down uric acid, so adding 1 cup of vinegar to the rinse water is especially good for babies' clothes. To get wool and cotton blankets soft and fluffy as new, add 2 cups white vinegar to a full tub of rinse water. DO NOT USE VINEGAR IF YOU ADD CHLORINE BLEACH TO YOUR RINSE WATER. IT WILL PRODUCE HARMFUL VAPORS.

Baking Soda. 1/4 to 1/2 cup baking soda per wash load makes clothes feel soft and smell fresh.

Dry Bleach. Dry bleaches containing sodium perborate are of low toxicity (unless in strong solution, then they can be irritating to the skin). Use according to package directions.

Baking Soda. You can cut the amount of chlorine bleach used in your wash by half when you add 1/2 cup baking soda to top loading machines or 1/4 cup to front loaders.

Protein Shampoo. When handwashing silk use a protein shampoo to "feed" the protein in the silk.

Vinegar. To remove smoky odor from clothes, fill your bathtub with hot water. Add 1 cup white vinegar. Hang garments above steaming bath water.

Cornstarch. For homemade laundry starch, dissolve 1 tablespoon cornstarch in 1 pint cold water. Place in a spray bottle. Shake before using. Clearly label the contents of the spray bottle.

Fabric softener. Add 1 cup of white vinegar or 1/4 cup of baking soda to the final rinse.

Lime & Mineral Deposit Remover

Vinegar and Paper Towels. Hard lime deposits around faucets can be softened for easy removal by covering the deposits with vinegar-soaked paper towels. Leave the paper towels on for about one hour before cleaning. Leaves chrome clean and shiny.

For Plastic and Metal Showerheads: *Vinegar.* To remove deposits which may be clogging your metal showerhead, combine 1/2 cup white vinegar and one quart water. Then completely submerge the showerhead and boil 15 minutes. If you have a plastic showerhead, combine 1 pint white vinegar and 1 pint hot water. Then completely submerge the showerhead and soak for about one hour.

Metal Cleaners & Metal Polishes

ΔΙ ΙΙΜΙΝΙΙΜ

Cream of Tartar. To remove stains and discoloration from aluminum cookware, fill cookware with hot water and add 2 tablespoons cream of tartar to each quart of water. Bring solution to a boil and simmer ten minutes. Wash as usual and dry.

Vinegar. To clean an aluminum coffeepot and remove lime deposits, boil equal parts of water and white vinegar. Boiling time depends upon how heavy deposits are.

BRASS.

Olive Oil. Brass will look brighter and require less polishing if rubbed with a cloth moistened with oil after each polishing. Olive oil retards tarnish.

Worcestershire Sauce. Clean and polish unlacquered brass to a shine with a soft cloth dampened with Worcestershire Sauce. The acid-salt combination in the Worcestershire Sauce eats away the tarnish.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply paste to brass and let sit for 15 minutes to 1 hour. Rinse with clean warm water and polish dry.

Lemon and Salt or Baking Soda. Make a paste of lemon juice and salt and rub with a soft cloth, rinse with water, and dry. Or use a slice of lemon sprinkled with baking soda. Rub brass with the lemon slice, rinse with water, and dry.

Vinegar and Salt. Pour vinegar over the surface. Sprinkle salt over the acid and rub in the mixture. Rinse with warm water and polish dry.

Lemon Juice and Cream of Tartar. Make a paste of lemon juice and cream of tartar. Apply, leave on for 5 minutes and then wash in warm water. Dry with a soft cloth.

BRONZE.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply paste to bronze and let sit for 15 minutes to 1 hour. Rinse with clean, warm water, and polish dry.

CHROME

Vinegar. To clean chrome, wipe with a soft cloth dipped in undiluted white or cider vinegar.

Baby Oil. Apply baby oil with a soft cloth and polish to remove stains from chrome trim on faucets, kitchen appliances, vehicles, etc.

Newspaper. To make chrome fixtures shine brightly, rub them with newspaper after they have been wet. Wear gloves to avoid getting newsprint on your hands and other surfaces.

Aluminum Foil. Rub chrome with aluminum foil, shiny side out.

COPPER.

Catsup or Worcestershire sauce. Rub the copper pot with catsup or Worcestershire sauce to make the tarnish disappear.

Salt and vinegar spray. Add 3 tablespoons of salt to a spray bottle of vinegar, spray the solution on the copper pot, let set and then rub clean.

Vinegar and Salt. If copper is tarnished, boil article in a pot of water with 1 tablespoon salt and 1 cup white vinegar for several hours. Wash with soap in hot water. Rinse and dry.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply the paste to copper and let sit for 15 minutes to 1 hour. Rinse with clean warm water, and polish dry.

Lemon and Salt or Baking Soda. Make a paste of lemon juice and salt, and rub with a soft cloth, rinse with water, and dry. Or use a slice of lemon sprinkled with baking soda or salt. Rub copper with the lemon slice and rinse with water and dry.

Vinegar and Salt. Pour vinegar over the surface. Sprinkle salt over the acid and rub in the mixture. Rinse with warm water and polish dry.

Lemon Juice and Cream of Tartar. Make a paste of lemon juice and cream of tartar. Apply, leave on for 5 minutes, and then wash in warm water. Dry with a soft cloth.

Sour Milk. Copper bottom pans can be cleaned with sour milk poured into a flat dish or bowl. Soak copper bottom for approximately 1 hour. Rinse and dry.

Soapy Water. Wash in lukewarm soapy water and dry with a cotton cloth. Polish with a chamois cloth.

Toothpaste. Clean with toothpaste and a soft toothbrush.

PEWTER.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply paste to pewter and let sit for 15 minutes to 1 hour. Rinse with clean warm water, and polish dry.

SILVER.

Polishing silver while wearing rubber gloves promotes tarnish. Instead, choose plastic or cotton gloves.

Baking Soda. Apply a paste of baking soda and water. Rub, rinse, and polish dry with a soft cloth. To remove tarnish from silverware, sprinkle baking soda on a damp cloth and rub it on the silverware until tarnish is gone. Rinse and dry well.

Sour Milk or Buttermilk. Place silver in a pan. Cover with sour milk or buttermilk. Let stand overnight, and in the morning rinse with cold water and polish dry with a soft cloth.

Aluminum Foil and Rock Salt. Fill a glass jar 1/2 full with strips of aluminum foil, then add 1 tablespoon rock salt and enough cold water to fill the jar. Keep covered. Dip silver items into the jar and leave for two minutes. Rinse well and dry.

Aluminum Foil, Baking Soda, and Salt. Place a sheet of aluminum foil in the bottom of a pan, add 2-3 inches of water, 1 teaspoon baking soda, 1 teaspoon salt, and bring to a boil. Add silver pieces, boil 2-3 minutes, making sure the water covers the silver pieces. Remove silver, rinse, dry, and buff with a soft cloth. This method cleans the design and crevices of silver pieces.

Toothpaste. To clean off tarnish, coat the silver with toothpaste, then run it under warm water, work it into a foam, and rinse it off. For stubborn stains or intricate grooves, use an old soft-bristled toothbrush.

STAINLESS STEEL.

Olive Oil. Rub stainless steel sinks with olive oil to remove streaks.

Vinegar. To clean and polish stainless steel, simply moisten a cloth with undiluted white or cider vinegar and wipe clean. Can also be used to remove heat stains on stainless steel cutlery.

Club Soda. Remove streaks or heat stains from stainless steel by rubbing with club soda.

Oven Cleaner

Prevention. Put a sheet of aluminum foil on the floor of the oven, underneath but not touching the heating element. Although this may slightly affect the browning of the food, the foil can be easily disposed of when soiled. Clean up the spill as soon as it occurs.

Salt. While the oven is still warm, sprinkle salt on the spill. If the spill is completely dry, wet the spill lightly before sprinkling on salt. When the oven cools down, scrape away the spill and wash the area clean.

Vinegar. Retard grease buildup in your oven by dampening your cleaning rag in vinegar and water before wiping out your oven.

Baking Soda and Very Fine Steel Wool. Sprinkle water followed by a layer of baking soda. Rub gently with a very fine steel wool pad for tough spots.

Wipe off scum with dry paper towels or a sponge. Rinse well and wipe dry. **Arm & Hammer Oven Cleaner.** Consumers Union chemists declared this product nontoxic. Use according to label directions.

Paint Brush Renewer

Vinegar. Soften hard paintbrushes in hot vinegar for a few minutes. Then wash paintbrush in soap and warm water and set out to dry.

Paint

Prevention. Determine the amount of paint you need for a job and purchase only that amount.

Alternative to oil-based paint. Use water based paint instead of oil-based paint; latex paints are free of the flammable and toxic solvents found in oil-based paints.

Alternative to water-based paint. Use whitewash (a combination of hydrated lime, water and salt which lacks heavy metal pigments, alkyd resins and other chemicals common in water-based paint) for fences, barns, basements and outbuildings. Use a dust mask when mixing.

Pest Control

Helpful predators around the home include frogs, spiders, ladybugs, praying mantis, and dragonflies. Keeping these beneficial creatures around can help you reduce pest populations.

ANTS.

Prevention. Block points of entry. Clean up all sources of food. Keep food in ant proof containers. Use commercial sticky barriers to block ants.

Pennyroyal, Spearmint, Southernwood, and Tansy. Growing these plants around the border of your home will deter ants and the aphids they carry.

Sugar. Place small sponges soaked in sugar sweetened water wherever ants have been seen. Collect the sponges periodically and plunge them into hot water

Green sage. Place a small quantity of green sage on your cupboard shelves.

Vinegar. Wash counter tops, cabinets and floor with equal parts vinegar and water to deter ant infestations.

Flour and Borax. Mix 1 cup flour and 2 cups borax in a quart jar. Punch holes in the jar lid. Sprinkle the contents around the house foundation. Keep borax out of the reach of children and pets.

Bonemeal or powdered charcoal or lemon. Set up barriers where ants are entering. They will generally not cross lines of bonemeal or powdered charcoal. If you can find a hole where ants are entering the house, squeeze the juice of a lemon in the hole or crack. Then slice up the lemon and put the peeling all around the entrance.

CARPENTER ANTS/TERMITES.

Prevention. Prevent moist wood by adequate home maintenance. Repair leaky gutters. Place plastic sheeting on ground surface of crawl spaces as a vapor barrier. Improve ventilation to damp areas. If building in a known problem area consider using non-wood building material. Remove potential sources of ant nests and other means of access which are close to the home: remove decaying stumps and wood debris, eliminate wood to earth contact surfaces for your home. Check firewood carefully for insects before bringing it inside.

FLEAS.

Prevention. If possible, establish one sleeping area for your pet(s). Restrict pets from bedrooms, attics, basements and hard-to-clean areas. Wash bedding material.

Vacuum. Vacuum at least weekly all areas where pets have access, remove the vacuum bag, seal it, and dispose of it immediately outside your home.

Vinegar. A ratio of 1 teaspoon vinegar to 1 quart water (per 40 pounds of pet weight) in their drinking water helps to keep your pets free of fleas and ticks.

Fennel, Rosemary, Red Cedar Shavings, Sassafras, Eucalyptus, or Pennyroyal. Spread leaves or shavings of these plants under and around the pet's bed.

Salt. Salt the crevices of the doghouse and/or wash the pet periodically in salt water.

FLIES.

Prevention. Keep kitchen garbage tightly closed. Sprinkle dry soap or borax into garbage cans after they've been washed and allowed to dry; it acts as a repellent.

Orange. Scratch the skin of an orange and leave it out; the citrus acts as a repellent.

Cloves. Hang clusters of cloves to repel flies.

Mint or Basil. Mint planted around the home repels flies. A pot of basil set on the window sill or table helps to repel flies. Keep basil well-watered from the bottom so that it produces a stronger scent. Dried ground leaves left in small bowls or hung in muslin bags are also effective.

Fly Swatters, Fly Traps, or Fly Paper. Use according to label directions. Sugar and Corn Syrup. Make your own fly paper by boiling sugar, corn syrup, and water together. Place mixture onto brown paper and hang or set out.

Egg, Molasses, and Black Pepper. Beat the yolk of an egg with a tablespoon each of molasses and finely ground black pepper. Set it about in shallow plates. Kills flies rapidly.

HOUSEPLANTS.

Prevention. Get rid of infested plants. Use resistant plant varieties whenever possible.

All purpose spray. For an all purpose spray grind together three hot peppers, three large onions and one whole bulb of garlic. Cover the mash with water and let stand overnight. Strain through a cheesecloth and add enough water to make a gallon of spray. Use on roses, azaleas, mums and beans three times daily for one or two days during heavy infestation.

Garlic clove. Plant a garlic clove along with your plant. As it grows, simply keep cutting it down so it will not affect the appearance of your plant. Garlic will not harm the plant, but bugs hate it.

Tobacco. Place tobacco on potted plant soil. This helps control indoor infestations of a variety of pest that hatch from eggs deposited when plants are outside.

Tobacco and water spray. Place a large handful of pipe or cigarette tobacco in 4 quarts of warm water. Let stand for 24 hours. Dilute and apply with a spray bottle. Nicotine is deadly to mammals in high concentration: use caution when handling.

Soap and water spray. Mix up a solution of liquid soap and water in a pump-spray bottle at the ratio of 2 1/2 teaspoons per quart. Spray infested leaves with soapy water, then rinse off with plain water after a few minutes.

MICE.

Mashed potato powder or buds. Place instant mashed potato powder or buds in strategic places with a dish of water close by. After eating the powder or buds mice will need water. This causes fatal bloating.

Mouse Traps. Use according to label directions.

MOSQUITOES.

Prevention. Encourage natural predators such as dragonflies or praying mantises. Eliminate pools of stagnant water. Avoid wearing perfume, bright colors, flowery prints, and bright jewelry as these items attract mosquitoes.

Citronella. Burn citronella candles to repel insects.

Tansy or Basil. Plant tansy or basil around the patio and house to repel mosquitoes.

MOTHS.

If you can see moths, these aren't the ones to worry about. Moths that cause damage to clothes are too small to notice. It is the larvae of these moths that eat fabric.

Prevention. Periodically shake out woolens. To avoid contaminating newer material, discard or donate woolens, leathers and feather products that are no longer used. Wash clothing and clean furniture from yard or garage sales thoroughly before bringing into your house: they may contain moth eggs. Before storing woolens, dry clean and double wrap them in tightly sealed plastic bags; moth larvae especially like areas soiled with food stains. Store seasonal woolens in very tight containers when not in use.

Rosemary, Mint, Thyme, Cloves, and Ginseng (optional). Chicago area weavers and spinners use 1/2 pound rosemary, 1/2 pound mint, 1/4 pound thyme, 1/4 pound ginseng (optional), and 2 tablespoons cloves. Mix and put in

cheesecloth bags and place in closets or drawers.

Dried Lavender or Rosemary and Mint. Make sachets of dried lavender or equal portions of rosemary and mint. Place in closets, drawers, or closed containers to mothproof garments.

Rosemary, Sage, Mint, Dried Lemon Peel and Cinnamon. Mix handfuls of first three ingredients. Add a little lemon peel and a pinch of cinnamon. Place in muslin bags.

Molasses, Vinegar, and Yellow Container. To trap moths, mix 1 part molasses with 2 parts vinegar and place in a yellow container to attract moths. Clean regularly.

Clothes Dryer. Kill moth eggs by running garment through a warm dryer. **PESTICIDES.**

DO NOT USE: These pesticides are banned from household use: Aldrin, Chlordane, Cyanide, DBCP, DDT, Dieldrin, Heptachlor, Kepone, Lindane, Mirex, Silvex, 2,4,5,-T, Toxaphene, Arsenates, Sodium Arsenite, Creosote, Pentachlorophenol (PCP).

Roaches.

Prevention. Close to all gaps around pipes and electric lines where they enter the house by using cement or screening. Caulk small cracks along baseboards, walls, cupboards, and around pipes, sinks, and bathtub fixtures. Seal food tightly, Rinse dishes that are left overnight. Do not leave pet food out overnight.

Hedge Apples (Osage Orange). Cut hedge apples in half and place several in the basement, in cabinets, or under the house to repel roaches.

Flour, Cocoa Powder, and Borax. Mix together 2 tablespoons flour, 4 tablespoons borax, and 1 tablespoon cocoa. Set the mixture out in dishes. CAUTION: Borax is toxic if eaten. Keep out of reach of children and pets.

Borax and Flour. Mix 1/2 cup borax and 1/4 cup flour and fill a glass jar. Punch small holes in jar lid. Sprinkle powder along baseboards and door sills. CAUTION: Borax is toxic if eaten. This recipe may not be for you if there are young children or pets in the house.

Oatmeal, Flour, and Plaster of Paris. Mix equal parts and set in dishes. Keep out of reach of children and pets.

Baking Soda and Powdered Sugar. Mix equal parts and spread around infested area.

Porcelain Cleaner

Cream of Tartar. To clean porcelain surfaces, rub with cream of tartar sprinkled on a damp cloth. Works well on light stains.

RUGS (also see "Carpet/Rug")

Septic Tank

Prevention. Avoid putting items down your sink or toilet that bacteria cannot digest or that will adversely effect the environment. Undigestible items include grease, fat, hair, cigar and cigarette butts, filters, facial tissue, paper towels, napkins, sanitary napkins and Band-Aids.

Scouring Powder

The amount of chlorine in scouring powder is not significant enough to cause harm, but if you want to totally avoid chlorine or are sensitive to it follow these recines

Non-Chlorine Scouring Powder. Bon-Ami Cleaning Powder and Bon-Ami Polishing Cleaner are a couple examples of commercially available products.

Baking Soda or Dry Table Salt. Both of these substances are mild abrasives and can be used as an alternative to chlorine scouring powders. Simply put either baking soda or salt on a sponge or the surface you wish to clean and then scour and rinse.

Shoe Polish

Cold Pressed Nut Oil, Olive Oil, Walnut Oil, or Beeswax. Apply oil to leather product and buff with a chamois cloth to a shine.

Lemon Juice. Lemon juice is good polish for black or tan leather shoes. Follow by buffing with a soft cloth.

Vinegar. Remove water stains on leather by rubbing with a cloth dipped in a vinegar and water solution.

Petroleum Jelly. A dab of petroleum jelly rubbed into patent leather gives a glistening shine and prevents cracking in the winter.

Vinegar. To shine patent leather, moisten a soft cloth with white vinegar and wipe clean all patent leather articles. The color of the leather may be slightly changed.

Coffee. Give black suede a facelift by applying a sponge slightly moistened with cool, black coffee. Rub in the coffee gently.

Art-Gum Eraser and Sandpaper or Emery Board. Dirt marks on suede can be rubbed out with an art-gum eraser. Then buff lightly with sandpaper or an emery board.

Vinegar and Linseed Oil. To clean leather, rub equal parts of vinegar and linseed oil into the leather and then polish with a soft cloth.

Smoke Detector (ionizing type)

Alternative. Choose a non-ionizing, photoelectric-type detector.

Spot/Stain Remover

ALL PURPOSE.

Cornstarch paste. Rub the stain with a cornstarch paste and brush off when drv.

Rubbing alcohol and water. The basic ingredient for many commercial spot removers is 2 parts water to 1 part rubbing alcohol.

Detergent, baking soda, soap paste. Apply a paste of detergent, soap, or baking soda and water to the stain; allow the paste to penetrate a few minutes before rubbing clean and rinsing.

Borax. Dissolve 1/4 cup of borax in 3 cups of cold water. Sponge it on and let it dry, or soak fabric in the solution prior to washing it in soap and cold water.

Hydrogen peroxide or rubbing alcohol. Removes blood, chocolate and other stains. Safe for all fibers, but dyed fabrics should be tested for color-fastness.

White vinegar. Safe for all fibers, but changes the colors of some dyes. Good on cola, perspiration, pet stains and other non-oily stains, and for devellowing silk or wool. Also useful in removing grease stains from suede.

"Wet spotter". Used to remove many kinds of stains: 1 part glycerin, 1 part liquid dishwashing detergent, 8 parts water. Store in a plastic squeeze bottle and shake well before using.

RUST.

Lemon juice and salt. Saturate with lemon juice and rub with salt. If possible dry in direct sunlight, then wash

Peeled Potatoes and Baking Soda or Salt. To remove rust from tinware, rub with a peeled potato dipped in a mild abrasive such as baking soda or salt.

Aluminum Foil. Briskly scrub rust spots on car bumpers with a piece of crumpled aluminum foil, shiny side up. Also works well on the chrome shafts of golf clubs.

CHEWING GUM.

Ice. Rub with ice. Gum will flake off.

INK.

"Tamp." For tamping, use a brush similar to a shoe polish brush. Tamp the brush lightly and squarely on the stain or spot with lukewarm glycerin.

Cream of tartar paste. Make a paste of cream of tartar and rub on the stain. Let the paste dry, then brush off. Repeat as often as necessary.

GREASE.

To remove grease from concrete flooring: Dry Cement. Sprinkle dry cement over grease. Allow it to absorb the grease, then sweep up.

CARPET.

General tips on stain removal: Clean up spills as fast as you can. Blot or scrape up as much of the spill as possible, blotting from the outside toward the center. Test the stain remover on an area under the sofa and wait 15 minutes to see if it damages the carpet color. After you clean the carpet, blot it dry and weight down a small cushion of paper towels with a heavy object to soak up all the moisture. Don't panic!

General stains: Borax. Use according to label directions. Borax can be toxic if ingested.

Blood stains: *Cold water or Club Soda.* Sponge stain immediately with cold water or club soda and dry with a towel. Repeat as necessary.

Ink Stains: Cream of Tartar and Lemon Juice. Place cream of tartar on the ink stain and squeeze a few drops of lemon juice on top. Rub into the stain for a minute, brush off the powder with a clean brush and sponge immediately with warm water, being careful not to saturate the carpet backing. Repeat if necessary.

Isopropyl Alcohol. Be sure to wear gloves and work in a well-ventilated area. Blot rubbing alcohol onto stain.

Non-oily stains: *Vinegar and Liquid Soap.* Mix together 1 teaspoon of white vinegar, 1 teaspoon liquid detergent, and 1 pint lukewarm water. Apply this mixture to the non-oily stain with a soft brush or towel. Rub gently. Rinse with a towel dampened in clean water. Blot dry. Repeat this process until the stain is removed. Dry the carpet quickly using a fan or blow dryer. There is a chance that vinegar may bleach some dark, sensitive colors, so try it on an inconspicuous area first.

Soot stains: *Salt.* Sprinkle the area generously with salt. Allow the salt to settle for at least 15 minutes before vacuuming.

Pet stains and odors: *Vinegar and Liquid Soap.* Vinegar will kill the odor of urine and prevent staining if you can get to the spot right away. First absorb as much moisture as you can with dry paper towels. Next rinse the area with warm water and apply vinegar and soap solution into the stain using a clean cloth or paper towel and leave on for 15 minutes. Rinse with a towel dampened in clean water and blot dry. There is a chance that vinegar may bleach some dark, sensitive colors, so try in on an inconspicuous area first.

CLOTHES.

Blood: *Meat tenderizer.* Cover stained area with meat tenderizer, apply cool water to make a paste, let set for 15-30 minutes and then sponge with cool water.

De-yellow silk or wool: *Vinegar.* Mix 1 tablespoon white vinegar in 1 pint of water. Sponge with this solution and rinse. Wash as usual.

Rust: Lemon juice and salt. Saturate with lemon juice and rub with salt. If possible dry in direct sunlight, then wash as usual.

Cream of tartar. To remove rust from white washables, cover the stains with cream of tartar. Then gather the ends of the article to keep the powder on the spot and dip the entire spot in hot water for about 5 minutes. Wash as usual.

Chocolate: Club Soda, Shortening, or Milk. Soak stain with club soda before washing; or rub shortening into stain and wash; or apply milk to stain to keep from setting.

Cola: White Vinegar. Apply undiluted vinegar directly to the stain within 24 hours. Wash as usual.

Perspiration stain: White Vinegar or Lemon Juice or Aspirin. Sponge stains with a weak solution of white vinegar or lemon juice, or soak the fabric in water in which 2 aspirins have been dissolved.

Collar stains: *Hair shampoo*. Brush hair shampoo into soiled shirt collars before laundering. Shampoo is made to dissolve body oils.

Grease on suede: *Vinegar or club soda.* Sponge spot with a cloth dipped in vinegar or club soda. Dry and restore nap by brushing with a suede brush.

Grease on double knit: *Club soda.* Sponge on club soda to remove grease from double knit fabrics.

Toilet Bowl Cleaner

IF YOU DO USE BLEACH TO CLEAN YOUR TOILET BOWL, NEVER MIX BLEACH WITH VINEGAR, TOILET BOWL CLEANER, OR AMMONIA. The combination of bleach with any of these substances produces a toxic gas which can be hazardous.

Baking Soda and Vinegar. Sprinkle baking soda into the bowl, then drizzle with vinegar and scour with a toilet brush. This combination both cleans and deodorizes

Borax and Lemon Juice. For removing a stubborn stain, like bowl ring, mix enough borax and lemon juice into a paste which can cover the entire ring. Flush toilet to wet the sides, then rub on paste. Let sit for 2 hours and scrub thoroughly. For less stubborn toilet bowl rings, sprinkle baking soda around the rim and scrub with a toilet brush.

Tub & Tile Cleaner

Baking Soda. Sprinkle baking soda like you would scouring powder. Rub with a damp sponge. Rinse thoroughly.

Vinegar and Baking Soda. To remove film buildup on bathtubs, apply vinegar full-strength to a sponge and wipe with vinegar first. Next, use baking soda as you would scouring powder. Rub with a damp sponge and rinse thoroughly with clean water.

Vinegar. Vinegar removes most dirt without scrubbing and doesn't leave a film. Use 1/4 cup (or more) vinegar to 1 gallon water.

Baking Soda. To clean grout, put 3 cups baking soda into a medium-size bowl and add 1 cup warm water. Mix into a smooth paste and scrub into grout with a sponge or toothbrush. Rinse thoroughly and dispose of leftover paste when finished.

Watch Crystal Cleaner

Toothpaste. Toothpaste can be used as a watch crystal scratch-remover and polish.

Window & Glass Cleaner

A few tips on window washing: (1) never wash windows while the sun is shining on them because they dry too quickly and leave streaks; (2) when polishing windows use up and down strokes on one side of the window and side to side strokes on the other to tell which side requires extra polishing; and (3) to polish windows or mirrors to a sparkling shine, try a natural linen towel or other soft cloth, a clean, damp chamois cloth, a squeegee, or crumpled newspaper. One word of warning about newspaper: while newspaper does leave glass lint-free with a dirt-resistant film, persons with sensitivities to fumes from newsprint may wish to avoid the use of newspaper as a cleaning tool.

ALL PURPOSE.

Vinegar. Wash windows or glass with a mixture of equal parts of white vinegar and warm water. Dry with a soft cloth. Leaves windows and glass streakless. To remove those stubborn hard water sprinkler spots and streaks, use undiluted vinegar.

Borax or Washing Soda. Two tablespoons of borax or washing soda mixed into 3 cups water makes a good window cleaner. Apply to surface and wipe dry.

Cornstarch and Vinegar. Mix 3 tablespoons cornstarch and 1/2 cup white vinegar into 1 gallon warm water. Apply to surface and wipe dry.

Lemon Juice. Mix 1 tablespoon lemon juice in 1 quart water. Apply to surface and wipe dry.

Baking Soda. To clean cut glass, sprinkle baking soda on a damp rag and clean glass. Rinse with clean water and polish with a soft cloth.

SCRATCHES, STAINS AND DISCOLORATION IN WINDOWS AND GLASS.

Toothpaste. Rub a little toothpaste into the scratch. Polish with a soft cloth. **Dry Mustard and Vinegar.** Blend 3 parts dry mustard and 1 part white vinegar into a paste. Apply paste to discolored or stained portion of window or mirror and rub until the stain disappears. Rinse well with clean water. **AVOID EYE CONTACT; DRY MUSTARD CAN BE DAMAGING TO THE CORNEA.**

For More Information Call:

- 1-360-397-6118 ext. 4016 Clark County Solid Waste provides information about household and business hazardous waste, waste reduction, recycling, composting and other solid waste issues.
- **1-360-696-8186** *Vancouver Solid Waste* provides information about waste reduction, recycling, composting and other solid waste issues.
- **Department of Ecology: 1-360-690-7171** Vancouver Field Office provides information on business generated waste and water quality issues.
- **1-360-407-6300** *24 Hour Emergency Spill Response* provides for the cleanup of chemical and hazardous waste spills and leaks.
- **1-800-633-7585** *Hazardous Substance Information Office* provides information about the proper disposal of business generated hazardous products/waste.
- **1-800-RECYCLE** Recycle Hotline provides information about recycling non-toxic products and the disposal of household hazardous waste products.

Additional Hazardous Material/Waste brochures are available from Clark County Department of Public Works. To obtain a copy of the following brochures call 397-6118 ext. 4352.

- Household Hazardous Material Product Labeling
- Household Hazardous Material Purchasing, Storing and Disposing
- Household Hazardous Material Household Safety: Preventive Measures and Protective Equipment
- Safer Alternatives: Reducing The Risk In The Garage
- · Safer Alternatives: Reducing The Risk In The Home
- Safer Alternatives: Reducing The Risk In The Yard And Garden
- Household Hazardous Waste Disposal Program
- · Get The Point: Be Safe With Your Used Syringes
- Clark County Recycling Directory

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Although attempts have been made to ensure the accuracy of the information contained in this booklet, Clark County Department of Public Works assumes no responsibility or liability for the effectiveness or results of procedures described in this publication and disclaims any injury or damage resulting from the use or effect of any product or information specified in this publication.



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